

WORKSHOP
STATE WATER RESOURCES CONTROL BOARD
STATE OF CALIFORNIA

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Subject: *Review of Water Quality Standards
for the San Francisco Bay/
Sacramento-San Joaquin Delta Estuary*

—o0o—

Held in
Bonderson Building
Sacramento, California

—o0o—

**Wednesday, June 15, 1994
9:30 a.m.**

VOLUME IV

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1 WEDNESDAY, JUNE 15, 1994, 9:30 A.M.

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3 MR. CAFFREY: Good morning. Welcome to the second
4 day of the June workshop on the Bay-Delta standards. This
5 is the third in a series of four workshops that we have
6 scheduled on Delta standards.

7 We have a few cards left from yesterday and we have
8 one additional card that has been submitted.

9 I am not going to read the opening statement again.
10 It is in the record from yesterday. The only portion I will
11 read is a reminder for everybody of what the subjects for
12 today's workshop are:

13 What practices, excluding diversions,
14 contribute to the decline of fish and wildlife
15 resources depend on the Bay-Delta estuary?

16 Second, what modifications have the SWP and
17 CVP made to their operations to protect
18 endangered species and other species of
19 concern;

20 Third, what effect do upstream water
21 projects, other than the CVP and SWP, have on
22 the fish and wildlife resources of the Bay-
23 Delta estuary?

24 And fourth, what are the status and trends of
25 biological resources in the Bay-Delta estuary?

1 We will go directly to the cards, and there is one
2 adjustment from yesterday.

3 Is Dr. Russ Brown here?

4 DR. BROWN: Yes, I am.

5 MR. CAFFREY: Dr. Brown, I know you had a time
6 constraint and had high hopes of being able to go yesterday
7 afternoon, so we will do you first this morning.

8 I will read the order again: After Dr. Brown we will
9 have Jim Chatigny, David Guy, Kevin O'Brien, Alan Lilly and
10 Kati Buehler.

11 Dr. Brown, would you like to come forward and address
12 the Board? Good morning, sir. Nice to see you again.

13 DR. BROWN: Good morning. I think I will sit in this
14 chair. Good morning, Board and staff.

15 My name is Russ Brown. I work for Jones & Stokes
16 Associates, and we serve as the consultant to the State
17 Board and the Corps of Engineers on the proposed project in
18 the Delta, and it is out of the analysis that we have been
19 doing for that project that these comments and this
20 discussion comes. That's the origin of these ideas.

21 The subject that I am going to present would fall
22 into the categories of items 1 and 2, what environmental
23 factors influence the aquatic organisms in the Delta, and
24 what types of operational changes have been made to
25 accommodate those aquatic organisms.

1 In a word or phrase, what I would like to present is
2 the concept of using the historical daily data that's
3 available from the Delta as the most reliable basis for
4 developing an understanding of the Delta and developing
5 standards for protecting the various uses of that water.

6 Jones & Stokes is convinced that daily data and
7 analytical tools that would process that data into usable
8 information are an essential feature of understanding the
9 Delta in developing standards.

10 Although that is my theme, I am going to introduce a
11 second concept because it seems to us that it may be that a
12 slightly different approach to managing the Delta will be
13 required to utilize this daily data on an ongoing basis, and
14 so, I would like to digress just a second into that concept.

15 There are, in general, three types of changes, daily
16 changes to conditions in the Delta could be classified as
17 hydrologic changes caused by inflows and tidal effects;
18 there is water quality changes that occur on a daily basis
19 due to inflowing water quality that changes with hydrographs
20 and the salinity intrusion events that occur or can
21 fluctuate daily, and in addition, the fishery resource
22 itself, the migration, spawning, mortality and entrainment
23 of fish change very dramatically at times on a daily basis.

24 I hope everyone has the handout of my testimony.
25 These are the five figures at the back and if we can just

1 make it through these five figures, you can perhaps read the
2 text that goes along at a later time.

3 Because the use of daily information requires
4 somebody to sort of make decisions on an ongoing basis, we
5 are introducing just the concept here to get over the hurdle
6 of thinking that it would be impossible to use all of the
7 available information to make decisions for operating and
8 protecting species.

9 And we are introducing the concept of a Delta master
10 and this is supposed to invoke the idea of watermasters
11 where a person or a team, we are suggesting a three-person
12 team, is in charge of a water resource that is sort of
13 oversubscribed.

14 And this concept is working, as you know, in various
15 groundwater basins in California and stream basins in other
16 states. Perhaps we don't have very many examples of stream
17 watermasters in California, although there are some.

18 Actually, the theme this morning is the center
19 section, whether or not this makes sense to you, that there
20 would be a new structure, management structure, there is
21 available a wide variety of sampling and staff analysis
22 through the Inner Agency Ecological Program, and just in
23 general, they have two types of data resources available for
24 them to build hypotheses and make interpretations, and
25 eventually give advice to the managers, whoever they would

1 be.

2 Perhaps the Delta master concept isn't the final way.
3 But they have a lot of historical data and then they have
4 sort of their current information, which I am just calling
5 the real time monitoring network, and these are their data
6 resources.

7 Now, below them on the chart but sort of around them
8 in the real world, are all of the existing agencies and
9 management structures and facilities that make up what we
10 call the Delta, and I just have these split into three
11 groups; the federal agencies, the Club Fed, and they have a
12 number of perspectives and directives; then your own set of
13 requirements, both water rights and water quality as well as
14 an ongoing determination of what the beneficial uses are and
15 what benefits come from those; and then, there are the
16 existing facilities and existing management structures in
17 the Delta, and, of course, any of these can sort of change
18 at any moment, but these I am calling the framework for the
19 decision making, but in my view, it is difficult for that
20 structure as it exists to sort of integrate and make day-to-
21 day decisions, or to have those decisions facilitated.

22 Now, regardless of whether the Delta master concept
23 makes total sense to you, in some sense we are looking for a
24 way to operate the Delta that is different than what we have
25 ever done in the past.

1 And I offer this chart as my concept of what that
2 parallel management would be. And I am calling it parallel
3 management because there are at the same time water supply
4 targets and fish population targets that are hoped of being
5 managed for.

6 We do a very accurate job of accounting for water
7 availability and the moving of water down particular
8 channels at particular times. We know to the cubic foot per
9 second or to the acre-foot how much water moves through the
10 Delta.

11 What we are less able to do, or less skilled at the
12 moment, is tracking fish habitat characteristics and the
13 resulting fish populations for a variety of species that
14 must be tracked, and what I am suggesting with this chart is
15 that every time we control the Delta, closing the cross
16 channel for fish, that immediately sends water down
17 different channels. Closing the cross channel for flood
18 control immediately sends fish, if they are there, down
19 different channels, and so, it is not possible to decompose
20 or to separate the management for water and the management
21 for fish, and what I am suggesting is this has to be done in
22 parallel and it ought to be done at a consistent level of
23 accuracy.

24 And what I am suggesting is that we have a disparity
25 in the accuracy with which we can track water compared to

1 that with which we can track fish habitat or the resulting
2 populations.

3 And I am suggesting to the water supply advocates,
4 that accurate accounting of fish habitat and responses will
5 provide the greatest possible water supply for a chosen
6 level of fish protection. In other words, investing effort
7 in accurate accounting for fish habitat and population
8 responses is just as important now for providing water
9 supply as keeping track of the water itself.

10 And so, if our efforts shifted to the neglected half
11 of this parallel management, we would be well served.

12 I have a word picture to describe perhaps the current
13 management as contrasted to the parallel which I am calling
14 tandem, as in a tandem bicycle, and I would suggest that D-
15 1485 standard provides the frame, the water supply
16 management is in the front seat, the fish management in the
17 back seat, and we may even agree that in recent times the
18 seating order has been reversed and now the fish are in the
19 front seat and the water guys are in the back, but I suggest
20 that even that switching of the pedaling order has not
21 brought us to this which ought to be parallel management of
22 both resources at an equal level of detail.

23 Regarding standards and how they could be blended
24 into this overall picture -- I am off a day because I was
25 hoping to be here on June 14, but imagine we are still on

1 June 14, we are sitting just to the right-hand side of the
2 monitoring blind spot. We actually have almost no
3 information of what's happened in the Delta in the last
4 seven days.

5 Now, that's exaggerated for effect. We have some
6 information. We probably know our water numbers, but our
7 fish numbers, in particular, is where we have a blind spot.

8 We have good information of what occurred a week ago
9 or earlier in the historic record, and then, we, of course,
10 have very little information about what might happen in the
11 future. We can project our water, the black line, fairly
12 accurately. We can, perhaps from that, project our salinity
13 meant here to be the indicator of habitat distribution.

14 But the range of possible fish response at this point
15 in our sort of skill is quite large, so there is a broad
16 range of possible fish responses.

17 Now, I am then suggesting that this is going with
18 sort of day-to-day management of the Delta through some sort
19 of management organization, and that there needs to be some
20 guidelines given to this team, even if this was a highly
21 trusted team. And so, I am suggesting that there needs to
22 be then equal pillars of sort of absolutes. On the one
23 hand, there would be protective flow and salinity standards.
24 Now, these would be absolute requirements without any
25 question or ability to change them and they are meant to be

1 the low end of protection.

2 At the same time, there would be conservative water
3 supply requirements which are guaranteed in the same way
4 that the minimum flow and salinity standards are.

5 So, what we have here then is the extremes of
6 possible Delta operations that are regulated by fixed
7 monthly standards, but for the most part I am suggesting no
8 fixed monthly standards because it will be better to allow
9 the Delta master in my scheme to have standards and
10 directives to guide him, but they would actually be
11 operating under a wide range of conditional standards or
12 flexible standards, perhaps just two names for the same
13 thing, so that the actual hydrologic water quality and
14 fisheries responses or conditions that are observed form the
15 basis for the day-to-day decisions.

16 Just as an example, the required Delta outflow might
17 be a function of the unimpaired flow or a function of the
18 inflow, so you come up from that which rules, that instead of
19 specifying how many cubic feet per second are possible to be
20 exported and how much must be supplied as inflow, you would
21 have instead percentages perhaps so that, you know, thinking
22 of splitting the water, 50 percent of the inflow can be
23 exported, but 50 percent has to be for outflow, so as the
24 storm events come in, there's rules that specify how the
25 water is allocated without actually having to specify the

1 cubic feet per second numbers in each case.

2 So, now, back a little more to my major theme, which
3 is in order to do this sort of flexible operation with a
4 watermaster team, they need to have a lot of good data to
5 guide their decisions, and what I want to finish off my talk
6 with is that there's a large amount of high quality data so
7 that it would be possible to implement this sort of flexible
8 management scheme guided by some fixed standards, but
9 leaving a lot of the day-to-day decisions to this decision-
10 making body, whatever it would be.

11 I am suggesting that one of the troubles is
12 illustrated by fish ladders. We have quite a lot of data
13 that has been conscientiously collected. It has been
14 carefully processed and saved somewhere, but it is not in
15 all cases being used by all the people that could get value
16 from it, and this is sort of a fight to make data usable
17 information.

18 And I want just to sort of remind you of the amount
19 of daily data, so I am differentiating all of the data that
20 is available from the data that is available on a fairly
21 frequent basis so that you could on a week-to-week basis
22 make changes in your decision.

23 We have, of course, streamflow and pumping records on
24 a daily basis. We have a number of tidal gages which can be
25 used to understand what the tidal flows in the Delta are,

1 and therefore, how the fish are moving back and forth.

2 We have a wide variety of EC monitoring locations to
3 give us a picture of salinity response throughout the Delta
4 channels.

5 We now have a whole series of ultrasonic velocity
6 meters which actually measure the tidal flow in a number of
7 channels that the USGS is operating.

8 We have Banks, Tracy, and possibly PGandE's salvage
9 records for fish that are at a frequent basis, and give you
10 a picture of when fish are in the vicinity.

11 Then we have quite a number of fish net sampling, for
12 example, and larval sampling that occur at pretty high
13 frequency.

14 To process all of that data, we in this new scheme
15 that I am suggesting, would need a series of analytical
16 tools that would be able to do two things. First of all,
17 the existing historical Delta data is our only possible
18 source of understanding of what has actually happened in the
19 Delta. It is a natural system. We don't have total
20 control.

21 So, using simply analysis tools to more accurately
22 describe what actually happens on this daily time scale
23 would build our understanding and that, I would say, needs
24 to be a shared understanding between groups, not only the
25 first person to do the analysis. He needs to, therefore,

1 share his analysis tool. And as these tools become trusted,
2 then they would be the basis for the second group I am
3 calling projective. These would be the ones that in my
4 scheme the Delta master is using to decide should he close
5 the cross channel, should he open the Old River structure,
6 how much pumping cutback would save the most fish over a
7 period of time given the information that he has available
8 on flows and salinity, and fish abundance and distribution.

9 So, my last two points have to do with just a little
10 more detail, again on the availability of this data and the
11 fact that this could be implemented.

12 This is a plan, a scheme, of operating the Delta on a
13 day-to-day basis within some general guidelines but allowing
14 this appointed team to have quite a bit of flexibility on a
15 day-to-day basis.

16 So, the goal, again, of this system of data use that
17 I am describing here as my last slide, is to accurately
18 account for likely fish responses to the potential Delta
19 operations. Again, the idea is that we already accurately
20 account for water. The ingredient that is missing in
21 solving the Delta dilemma has to do with the fish habitat
22 and their responses to operations.

23 Our premise, again, is that the historical daily data
24 is the only reliable source of information for better
25 understanding and, therefore, building applicable standards

1 and these rules for operating, that I am suggesting would be
2 delegated to the Delta master.

3 So, the proposed action, to sort of make this a
4 reality, is simply to organize the historical daily data
5 from the Delta, allow a wide range of agency and other
6 assessment staff access, equal access to this data so that a
7 number of hypotheses can be built at this accurate level
8 of daily accuracy, build a common understanding of what
9 really is happening in the Delta, and that then forms the
10 basis for the pillar standards that I am suggesting, these
11 absolute standards that you would either continue with D-
12 1485 or something like that, a set of standards that are
13 protective at both ends of the possible operations, and then
14 guide the day-to-day decision making.

15 Trying to make this in a short time a little more
16 believable, maybe everyone is aware of Day flow, which is in
17 my view an integrated data file because this has all of the
18 terms that are needed for the water budget of the Delta, and
19 you may know that this is updated and put out to a wide
20 variety of people in the Delta analysis business by the
21 Department of Water Resources on an annual basis.

22 So the 1993 data has just recently become available
23 from the Central District. That is the only file that I am
24 aware of that comes out in this updated form that has daily
25 information on it.

1 What I want to end with is the suggestion that quite
2 a few additional files similar to Day flow would be created
3 between now and Christmas as the initial dissemination of
4 this shared data resource to begin the process of building
5 the analysis tools which might support, if you were to go
6 with my ideas on creating a Delta master, the daily tide
7 information which gives information on how the water level
8 fluctuations can be transformed into actually providing
9 estimates of the tidal flows and mixing that moves fish in
10 their larval stages and moves salt and other water quality
11 variables.

12 All of the EC monitors from the Delta can be
13 transformed or summarized into annual files that I am
14 calling day salt. There are exhibits that I have attached
15 to my testimony to try to make it seem more believable
16 this could be done, and the day salt as a data resource has
17 actually been created, and I have a handout that gives us
18 the 25 years of available data where you can see the daily
19 patterns of salt, and I have transformed that into what the
20 salinity gradient is, the X2, which is the abbreviated form
21 of where the salinity gradient begins in the Delta or the in
22 the estuary.

23 These are shown graphically for the 25 years. This
24 is to demonstrate that this sort of daily information is
25 available and could be disseminated to everyone in their own

1 computer. A similar file would be Day Temp, which would
2 have all the temperature records from the Delta. These are
3 available from Freeport and Vernalis, and those inflow
4 temperatures are actually what is used to estimate salmon
5 mortality in the Delta, and we could do better by having
6 actual in-Delta temperatures provided in this standardized
7 format for everyone to use.

8 We could do the same thing with day fish and egg and
9 larval data, any of the data that's collected on a frequent
10 basis could be made available on these standardized files.

11 Once these are out there, I propose or suggest that
12 they would actually act as a catalyst for stimulating people
13 to get more involved in creative analysis of the data, and
14 again, this is in contrast to just having a general
15 regression explanation of what must have happened during a
16 year based on long-term average flows or exports.

17 I think that's the end of my talk then.

18 MR. CAFFREY: All right, thank you very much, Dr.
19 Brown.

20 Are there questions from the Board members?

21 Mr. Stubchaer is drawing up his mike.

22 MR. STUBCHAER: Just a facetious question. I am a
23 little slow but I don't get why the fish is thinking of the
24 cow and the cow is thinking of the fish.

25 DR. BROWN: Well, this is my second word picture.

1 MR. DEL PIERO: Do you want to answer that question
2 on the record?

3 MR. CAFFREY: Mr. Stubchaer has the courage to ask
4 that one.

5 DR. BROWN: Well, I will give a hint. The cow is
6 here representing the agricultural interests of California.
7 This is the idea of parallel management. If we would ever
8 get to the day where fish dream of cows and cows dream of
9 fish, then I think we would be operating correctly.

10 MR. DEL PIERO: I thought that was the reflection of
11 the food chain there.

12 DR. BROWN: I could go for that, too. That might
13 work.

14 MR. CAFFREY: Mr. Stubchaer.

15 MR. STUBCHAER: I think on a more serious note, you
16 have presented an interesting concept. It's not really what
17 this workshop was about as far as I could see, and I don't
18 know how this would tie into the staff's standards we are
19 going to devise by December 15.

20 I guess what your suggestion would be is that the
21 standards be the pillars you talked about plus goals. Maybe
22 I really don't understand how this would tie into standards.

23 DR. BROWN: Perhaps what I am suggesting here is to
24 consider setting the standards allowing for this other
25 mechanism which would be a trusted vehicle for day-to-day

1 implementation of some more general guidelines so that you
2 would no longer have to take the full responsibility to
3 determine precisely how many cfs or what salinity levels
4 would provide optimum conditions in a given hydrologic
5 setting, but would be allowed to create these extreme
6 absolute standards that would be on the books, and then,
7 think more of how you would like to direct this day-to-day
8 manager to implement your general guidelines for water
9 allocations and decisions, and attempting this parallel
10 management that I am suggesting. So, it's perhaps a little
11 more on a conceptual level.

12 If you were to think of this sort of a scheme you
13 would not be required by December to come up with every
14 individual determination of what would be better in all
15 possible future cases. You would be setting up a mechanism
16 allowing some of that to be made by a group of decision
17 makers, whatever that would be, perhaps just representatives
18 from existing management agencies, and allowing them to
19 share some of the burden of setting standards.

20 MR. STUBCHAER: I think the concept has a lot of
21 merit and the idea of a flexible management with certain
22 guarantees for the fish and water, I think is very
23 attractive. Thank you.

24 MR. CAFFREY: Ms. Forster.

25 MS. FORSTER: I would think that the Department of

1 Water Resources would want to do this. I think this would
2 be really useful.

3 Have you had this presentation?

4 MR. ANDERSON: No, I have not, but it is very
5 interesting conceptually. Obviously, a lot of the
6 uncertainties we are working with in the Delta are not
7 amenable to fixed standards, so I am not sure they are
8 amenable to decision makers at this point either.

9 But I think the idea of getting managers is sort of
10 where we are heading.

11 MR. CAFFREY: Any other Board members have questions?
12 Anything from staff?

13 MR. HOWARD: Just a quick question. Have you given
14 any thought to what these minimum standards might be, the
15 ones both for the fish and for the water supply?

16 DR. BROWN: Well, yes, I have given some thought to
17 it and perhaps the way I sort of see the workshops laid out,
18 July is when you finally come in with your bottom line, but
19 just in general, it would have to do with the following
20 sorts of things. If I could just use the proposed EPA
21 standards, they involve a series of level of flows depending
22 on how much water is available, which I think is the right kind
23 of flexible concept, and if we just took their example,
24 their analysis would suggest that the minimums that they
25 think is allowable during the February-to-June period is a

1 flow that provides for the salinity gradient to begin at the
2 confluence, and I estimate that to be on the order of 7,000
3 cfs.

4 So, if we took from those sorts of analyses and
5 standard setting the absolute minimum that we think
6 protects, the net would be the required outflow, and then,
7 how often you can provide this extra which we know is
8 beneficial in some sense to the estuary, but we realize has
9 a water cost; that is, what you would allow to be determined
10 on a year-by-year basis depending on what kind of storm
11 events you got, and I think that is the thinking of the EPA
12 analysis, to have it flexible by water year types, and I am
13 suggesting even more flexibility in how you divvy out that
14 kind of extra water.

15 Some of the D-1485 standards, again, are based on
16 very minimum requirements to protect agriculture or to
17 protect water supply, for example, the 150 and 250 chloride
18 levels. Some of those may well be continued as these
19 absolute standards that need to be there, but then, how
20 those are achieved or where extra water goes, so again, my
21 idea is that these are the two extremes.

22 You have left perhaps half the water for this day-to-
23 day decision making. We want the water that we use for fish
24 protection to be very effective, to provide habitat or
25 transport results, and because that's likely to vary

1 literally with storm events or with where the fish have
2 spawned, I am suggesting that a lot of it ought to be left
3 to this other management structure, the watermasters.

4 MR. HOWARD: Okay.

5 MR. CAFFREY: Anything else from staff?

6 Dr. Brown, thank you for your continuing creativity.
7 We will take to heart your comments and I noted Mr.
8 Anderson's interest in what you proposed, and perhaps you
9 should be talking to the operators as well.

10 DR. BROWN: Thank you.

11 MR. CAFFREY: Thank you very much.

12 Jim Chatigny, good morning, sir.

13 MR. CHATIGNY: Good morning. Chairman Caffrey and
14 members of the Board, yesterday I would like to have wished
15 you a happy Flag Day, but didn't quite make it, so --

16 MR. CAFFREY: You know, I didn't really hear anybody
17 mention --

18 MR. CHATIGNY: I had it down here to do, but come
19 four o'clock it was time to head up the mountains, so we
20 did.

21 MR. CAFFREY: Do it today.

22 MR. CHATIGNY: All right, happy day the day after
23 Flag Day.

24 MR. CAFFREY: Thank you, sir.

25 MR. CHATIGNY: This is kind of like the radio call-in

1 talk shows, long-time listener, but one-time caller, so let
2 me get started here.

3 My name is Jim Chatigny, General Manager of the
4 Nevada Irrigation District, and I appear before you today as
5 Chairman of the Delta Tributary Agencies Committee.

6 We have provided written comments for the Board in
7 connection with the workshops and it is not my purpose to
8 reiterate all those comments. It is about five or six pages
9 long, but I do submit them for your review, and we look
10 forward to participating in the development of future
11 evidence and detailed testimony in regard to the comments we
12 made.

13 I would like to do one piece of housekeeping, if I
14 may. In our submittal on page 3 under the Sacramento River
15 Basin where we speak about the testimony of Steven Cramer,
16 we would like to add in that paragraph a list of the
17 agencies for that WRINT exhibit that we had and I will give
18 this to Alice.

19 There's some 12 or 13 agencies -- I have a lot of
20 initials and rather than reading, if I could just give them
21 to Alice and she could add them here.

22 MR. CAFFREY: Certainly.

23 (The aforementioned material reads as follows:

24 WRINT-NDWA-SSWD-ZMWC-GCID-CCID-CCC-FCWD-SLCC-

25 BBID-OID-SSJID-RID-WCWD-BWD-SEWD-Exhibit 1.

1 Page 3 -- Sacramento River Basin, 4th line
2 after the second Sacramento River.)

3 MR. CHATIGNY: DTAC represents agencies who rely upon
4 the area of origin and watershed of the tributaries which
5 are serving the Delta. We emphasize that because we also
6 rely on long-standing State policy and statutes that are
7 intended to protect our watersheds.

8 If I might, again, revert back to the word that we
9 heard yesterday about adaptive management, many of us
10 agencies in the mountains have to do that on a daily or
11 weekly basis where we meet, we look at the water supply that
12 we have in storage, we look at the weather conditions, and
13 then we meet on a recurring basis to make sure that we
14 deliver the water in a manner that will preserve it for as
15 long as we can because the supplies are limited to us in the
16 mountains.

17 Now, I also heard several words yesterday. We heard
18 the R word about reliability.

19 I would also add to that the S word, if I may, and
20 that would be survivability because we do not have the
21 opportunity of water flowing uphill.

22 We also represent another physical attribute of water
23 resource management which we believe is highly important in
24 connection with our deliberations, and as I said, because
25 water does not flow uphill.

1 Now, one of the earlier testimonies that we had when
2 Chairman Maughan was present, we were at the Convention
3 Center, and at that time we were talking about water
4 supplies, and I asked the Chairman at that time, well, we
5 will give you a supply of water if you could guarantee that
6 you will pump some water back up to us when we are short of
7 supply.

8 But I got no answer, so we would want to watch that
9 closely. We are at the headwaters and the decisions you
10 make, to the extent that they affect those headwaters, are
11 irretrievable and irreversible as far as we are concerned.
12 This is particularly important when we view the host of
13 factors that affect the resources within the Delta.

14 This past weekend I had the unpleasant opportunity of
15 having to attend a funeral in Phoenix, Arizona, and my wife
16 and I boarded an airplane in Sacramento, and as we flew out
17 over Folsom, we could see the brown ring around the
18 reservoir. And as we flew up Highway 80, we got to
19 Spaulding and Rollins Reservoirs, and we could see the brown
20 ring around the reservoirs.

21 Also, at Lake Tahoe there was a much smaller ring
22 around there, which shows that the reservoirs were not full,
23 that we are in this critically dry year.

24 And then, as we left Phoenix coming home on Sunday,
25 we had to fly into San Diego and then come up to Sacramento.

1 As we flew into San Diego we flew over several reservoirs
2 and there were no brown rings.

3 And as we flew up over Los Angeles and up over Lake
4 Perris and a few of the other reservoirs we saw no brown
5 rings there either. Until we got back up into the Central
6 Valley and the Melones and Don Pedro and Mokelumne, the
7 other reservoirs, then the brown rings started to show
8 again.

9 So, as we got closer to Northern California we had
10 less and less water in storage than what was available to
11 those people down below. Even San Luis had a very small
12 brown ring around it.

13 And then, as we got near the Delta, my wife was
14 sitting at the window and she wanted to ask me what is that
15 out there, and I said, well, that looks like the Delta, and
16 the Sacramento flowing in. She said there is plenty of
17 water in there. There were no brown rings there either.

18 But what I am trying to point out is in the
19 watersheds, the areas of origin, there's a very short supply
20 of water in many of these years when we are experiencing
21 these droughts.

22 But alarming to us, the only factor which continues
23 to be singled out is trying to find ways to get additional
24 water from agencies such as ours to provide for additional
25 Delta flows. There have not been focused, scientific

1 efforts to identify the causes of the problems in the Delta
2 or the cures for these problems, and as a result, we are
3 highly concerned about simplistic notions of Delta fixes
4 focusing on simply taking ten percent of our water, five
5 percent in dry years, but ten percent in critically dry
6 years, as additional water to meet the needs of the Delta
7 from the watersheds.

8 Most evidence and information to date indicates that
9 the cause of the problems, and indeed, potential solutions
10 to the problems are more closely related to the environment
11 within the Delta and the activities within the Delta than
12 they are to our own upstream operations and the water which
13 we require for our own personal needs and uses within our
14 area of origin.

15 We have our own public trust to manage. We are
16 required as good stewards to do that. We have our own fish
17 flows that we are required to provide. We have our storage
18 for recreation and we also have our wetlands that we are all
19 required to maintain in the upstream storage areas.

20 More importantly, we think that focusing on the
21 additional fresh water and those from whom it should be
22 taken continues what we consider the short-sighted approach
23 of trying to ignore all those other factors which may be
24 more troublesome and politically dangerous.

25 Our members diligently undertook the development of

1 water resources necessary for our community and that is
2 where the word *survival* came in, both from a consumptive
3 standpoint as well as to provide recreational and resource
4 protection within our areas.

5 But when larger export projects were developed we
6 were persuaded, as were apparently the majority of the
7 voters of the State, that those projects would be developed
8 in a way that would protect our rights and protect our water
9 resources future. It would not only be unreasonable, but a
10 gross breach of faith for the decision makers to ignore the
11 priority of our rights, and the promise upon which all of us
12 relied in supporting the expanded export project and the
13 direct impact those projects had caused in favor of a
14 reallocation concept which effectively ignores our
15 priorities and the needs of our communities and our public
16 trust requirements.

17 Finally, as set forth in our detailed comments, even
18 looking at the simplistic notion regarding increased water
19 flows as a sole solution, we believe the data and the
20 information supports the fact that in the 30-year window in
21 which the declines in the Delta have been noted, our
22 projects have not played a role and have not had a major
23 influence.

24 Indeed, the information available to us has become
25 increasingly persuasive that the steps at fishery resource

1 protection which have been undertaken within our agencies
2 have been successful until these resources arrived in the
3 Delta. Whatever impacts are causing this significant
4 decline in runs of the anadromous fish are not attributable
5 to the projects which I represent.

6 So, with that, I thank you for your attention and
7 look forward to participating further in your deliberations.

8 Again, we did submit other items in writing.

9 MR. CAFFREY: Thank you very much, Mr. Chatigny.
10 Mr. Brown.

11 MR. BROWN: No questions, Mr. Chairman, maybe a
12 statement, that I have had the opportunity to work with many
13 of the mountain county water agencies and get to know their
14 need for the last ten plus years and the area of origin
15 protection has come late for many of those agencies to where
16 the resources have been exported from these areas where they
17 are left with insufficient resources for their own needs and
18 development, and Mr. Chatigny makes the very critical point
19 that I think needs our best consideration in whatever we do
20 here.

21 Thank you, Mr. Chatigny.

22 MR. CHATIGNY: I might add to that, that population
23 growth is continuing in the mountain counties. It has not
24 slowed down and we are seeing an ever-increasing reduction
25 in the production of individual and private wells on private

1 properties, which is going to add more and more demand upon
2 our developed water supplies, so we are not trying to say
3 no, no, no, but we have to say watch us. Be careful because
4 we need the water to a certain extent, too.

5 MR. BROWN: Once the resource is exported, there is
6 no way to get water back up to them.

7 MR. CAFFREY: Anything else from Board members?
8 Staff?

9 Thank you very much, Mr. Chatigny, we appreciate your
10 comments.

11 David Guy.

12 MR. DUBOIS: You may be surprised at how much I have
13 aged.

14 MR. CAFFREY: David, you are getting handsomer every
15 day.

16 Good morning, Bill DuBois.

17 MR. DUBOIS: My name is William DuBois. I am
18 substituting for David Guy, who prepared this statement:

19 I am a consultant for the California Farm Bureau,
20 which submits the following comments in response to your
21 notice of the public workshop for June 14.

22 As a general matter, we commend the Board in its
23 efforts to consider all the factors that contribute to the
24 decline of fish and wildlife resources in the Delta and not
25 just the diversion of water.

1 It has been our long standing belief that many
2 factors other than diversion of water have significantly
3 affected the Delta and possibly even more significant at
4 this juncture, that these other factors will make any
5 attempts to mitigate the effects on the Delta very
6 difficult, if not impossible.

7 We, therefore, ask the Board to leave this workshop
8 today with two important ideas: First, that we cannot turn
9 back the clock and ignore the reality of the Delta today;
10 and second, considering the present state of the Delta, any
11 efforts to restore its fish and wildlife resources may be
12 futile.

13 We must all recognize that we cannot turn back the
14 clock to a simpler and less populous time. This is not
15 possible, nor does it make sense as a matter of policy. For
16 example, we cannot undo the serious problems in the Delta
17 and rivers created by mine abandonment and hydraulic mining.

18 We must also recognize that there are over 150
19 introduced aquatic species of plants and animals, including
20 over 27 different non-native fish species, which likely
21 includes the Delta smelt, and there will undoubtedly be
22 additional species introduced over time. Industrial and
23 municipal discharges also contribute to pollution levels
24 and directly affect fish and wildlife.

25 We think the most significant impact on Delta fish

1 and wildlife has been fishing, both legal and illegal.
2 History has indicated that fishermen were able to eliminate
3 the sardine fishery off the Monterey Coast without any help
4 from inland users of water.

5 We might refer you to Arthur F. McEvoy's book, the
6 *Fisherman's Problem*, which is a good source to understand
7 this problem.

8 Taken as a whole, these numerous factors have
9 dramatically altered the Delta, which has resulted in the
10 evolution of the fish and wildlife resources over the years.
11 The estuary is a dynamic system that changes over time,
12 constantly reacting to all of the forces that touch upon the
13 Delta.

14 We do not have a stable system that lends itself to
15 defined management actions that will result in specific
16 changes in population of target species, and it is not
17 realistic to restore our natural resources to untenable
18 levels which existed during times of significantly fewer
19 people.

20 The Farm Bureau has advocated that throwing water at
21 the problems in the Delta is no solution at all, but
22 instead, comprehensive management is the only way to improve
23 the Delta. Put differently, the Board cannot afford to
24 implement measures in the Delta involving large financial
25 and/or water costs without having a carefully articulated

1 opinion that such measures can provide significant
2 environmental benefits in the absence of measures addressing
3 the potentially significant factors being discussed today.
4 This simply does not make sense.

5 Of course, Californians, including farmers and
6 ranchers, can and should protect the environment better than
7 we have in the past, at each increasing level of our human
8 population. The environment will not be protected, however,
9 if efforts aimed at protecting the environment are futile.

10 There is a general water law doctrine that a call
11 cannot be made upon the waters of a river if the water will
12 not serve the purposes for which the call is made. This
13 doctrine applies to the Delta and dictates that increased
14 Delta outflow and restrictions in diversions cannot be
15 required without evidence that the water will actually
16 benefit the instream uses of the water.

17 This means that we need to question whether there is
18 a technical or scientific basis that any proposed water
19 management measures can be substantially effective
20 considering all of these other factors in the Delta, such as
21 the competition within the entire food chain by introduced
22 species. If this basis does not exist, then water
23 management measures will only serve to disrupt the economic
24 and social fabric of California.

25 I thank you for the opportunity to provide this

1 statement. Now we hope that in July we will have a more
2 comprehensive statement to offer. Thank you.

3 MR. CAFFREY: We will certainly look forward to that,
4 Mr. DuBois.

5 Any questions? Nothing from the Board members.

6 Anything from staff?

7 Thanks again, Bill.

8 Kevin O'Brien. Good morning, Mr. O'Brien.

9 MR. O'BRIEN: Good morning, Mr. Caffrey.

10 Mr. Chairman and members of the Board, I did submit
11 also some written comments, but I am going to depart from
12 those. I think you have heard a lot of the substance of
13 those from other speakers and I would like to focus on the
14 comment that the Chairman made to start this workshop, which
15 is the desire of the Board to encourage consensus among the
16 various interest groups.

17 I represent in this proceeding --

18 MR. DEL PIERO: Mr. Chairman, he represents well in
19 excess of about 30 or 40 agencies.

20 MR. O'BRIEN: I don't think it is quite that many.

21 MS. LEIDIGH: Is it this one that says *Sacramento*
22 *Valley Diverters*?

23 MR. O'BRIEN: Correct.

24 MS. LEIDIGH: It starts off, *Comments of Llano Seco*
25 *Rancho, Maxwell Irrigation District, Meridian Farms Water*

1 Company and so on. It was distributed yesterday.

2 MR. CAFFREY: We will make sure we have copies of it.

3 I'm sorry, Mr. O'Brien, please proceed.

4 MR. O'BRIEN: The clients I am representing in this
5 proceeding are all agricultural water users in the
6 Sacramento Valley. They hold senior water rights. They
7 irrigate approximately 300,000 acres of land.

8 In relation to this question of building consensus, I
9 think the good news is that people are taking that very
10 seriously in this round of hearings.

11 I have been involved in Bay-Delta hearings, I guess,
12 for nine years now and I don't remember a time where the
13 various interest groups were as engaged as they are in
14 grappling with trying to look for consensus solutions to
15 this, and I think that's a very positive sign.

16 I personally have been involved in the coalition, as
17 Mr. Berliner discussed yesterday, and I can tell you there's
18 a serious attempt going on out there to build coalitions.

19 The bad news is that there are still a couple of key
20 obstacles to moving forward with that approach and I would
21 like to discuss two of them with you today.

22 The main obstacle to achieving any kind of consensus
23 from my clients' viewpoint is the uncertainty that exists in
24 the minds of some people regarding the role of water right
25 priorities and the area of origin protections in the

1 allocation process.

2 I want you to know, first of all, that's not an
3 uncertainty in my mind. I think the law is very clear on
4 that. I don't think this is the time to argue my points on
5 that issue, but I think the area of origin statutes were put
6 there for a reason and I think this is exactly the reason
7 that we are involved in this proceeding, but you have heard
8 a lot from a lot of different parties in the last two days
9 about the need to come up with a fair-share allocation, to
10 ignore priorities, and come up with some other sharing
11 formula, and although that has a nice ring to it, I think
12 from the standpoint of people in the water rights holding
13 community, the suspicion is that that's just another way of
14 saying, we will take as much water as we can get for free,
15 which brings us back to the question of building consensus.

16 I don't think there is going to be real incentive for
17 the export users and junior right holders to come to the
18 table with the water right holders until it is made very
19 clear that the water right priorities and the area of origin
20 statutes still are very much alive and kicking.

21 And I think, although I am not advocating that this
22 Board, as part of the development of the water quality plan,
23 get into specific allocation decisions, I don't think you
24 can do that under CEQA and under due process limitations, I
25 think you can send a signal that you will in large part

1 enforce water right priorities and that you will follow area
2 of origin protection principles, and I think if you do that,
3 there are some things that can be brought together and I
4 think, frankly, there's a deal that could be made.

5 I think you don't have to look further than the
6 drought water bank to see that when the chips are down
7 agriculture will step to the plate as long as; number one,
8 the rights are respected and protected; and number two, fair
9 compensation is paid for the water.

10 We are not talking about getting rich off this. We
11 are talking about fair compensation that allows districts
12 and farmers to continue in business.

13 I think there's a lot of potential there, but I think
14 as long as people have it in their minds, and I think this
15 gets back to the Racanelli decision -- Racanelli is great
16 because everybody kind of reads into it what they want to
17 read. As long as that is leading people to believe that
18 they can get water for free, this kind of consensus approach
19 will not develop.

20 The second obstacle to building consensus, at least
21 in my clients' minds, is this question of fish screens. I
22 have personally been involved in that whole issue. I have
23 two districts that are in the process of testing sonic and
24 electrical devices up on the Sacramento River to try to
25 determine whether that is a viable alternative to fix

1 screens. We don't know whether that's going to be
2 successful yet or not.

3 But the point is these are two districts that
4 voluntarily stepped up and got involved in this. They are
5 operating under a Section 7 biological opinion. They are
6 spending hundreds of thousands of dollars of their own
7 money. They are getting some money from the Federal
8 Government and they are very seriously looking at this
9 issue.

10 A couple of things I have learned about fish screens
11 -- number one is not all of the pumps on the river and in
12 the Delta are taking fish, and the Board needs to understand
13 that. I know a lot of people argue in favor of a blanket
14 requirement that you put fish screens on every diversion in
15 the system.

16 I think Greg Wilkinson at the last workshop argued
17 under Article X, Section 2, you should find that unscreened
18 diversions are an unreasonable use of water per se.

19 I don't think the facts support that kind of
20 approach, and maybe more importantly, I don't think
21 agriculture can afford that kind of approach. If you look
22 at the cost of screening all of the pumps in the Delta and
23 in the Valley -- I don't have a precise number for you, but
24 I am confident it is well in excess of 200 million dollars,
25 and for many of those districts they just flat out can't

1 afford it.

2 So, there's got to be a better way, a more flexible
3 way to address the problem, and I would admit that in some
4 instances there are problems, but not to apply a blanket
5 kind of approach that doesn't take into account individual
6 variations.

7 And I guess my advice respectfully to the Board on
8 that point is you have got a big task in front of you in
9 putting this plan together and implementing a plan. I don't
10 think you need to bite off the issue of fish screens as part
11 of that process.

12 I think the National Marine Fisheries Service is in
13 the process of trying to decide whether to adopt a rule
14 making on that. I think there's a lot of things going on.
15 I think the Board can certainly be part of that, but to try
16 to deal with that issue as part of this water quality plan
17 process, I think would be a monumental mistake.

18 Thank you, that's all I have.

19 MR. CAFFREY: Thank you, Mr. O'Brien.

20 Mr. Brown.

21 MR. BROWN: Kevin, the same question that was asked
22 yesterday, can the industry help decide which of those
23 operations need to have fish screens and provide input to us
24 on that?

25 MR. O'BRIEN: I think they can, Mr. Brown. The

1 problem there is there needs to be some standards about what
2 it takes to require a fish screen. The situation you have
3 now is that districts are very reluctant to get into the
4 regulatory process because they are concerned that if
5 testing is done and they take one fish, they will have a
6 screen slapped on.

7 If we could develop some criteria that basically say
8 that the pumps that are taking significant fish and are
9 significantly contributing to the problem would need to be
10 screened. I think that's a concept that the agricultural
11 community could live with, and frankly, it's the proposal
12 that's been floated to NMFS, to set out a prioritization
13 process so we can get an independent group of scientists to
14 figure out what the numbers ought to be and everybody agree
15 to them up front. Then we know what we are getting
16 ourselves into. If we do that, I think it could work.

17 MR. DEL PIERO: Mr. O'Brien, are you suggesting a de
18 facto instead of a take permit for all the points of
19 diversion?

20 MR. O'BRIEN: I think there's various ways you could
21 do it, Mr. Del Piero. I think one of the reasons that NMFS
22 is looking at the rule-making route is that that gives them
23 a certain amount of flexibility to carve out exceptions. I
24 don't believe that the Endangered Species Act is so rigid
25 that if one pump is taking one winter-run salmon in an

1 entire irrigation season, that that mandates that that pump
2 have a screen, and I think NMFS would agree with that, and I
3 think where they are headed is trying to come up with some
4 criteria to determine which pumps do need screens and which
5 pumps don't.

6 MR. CAFFREY: Ms. Forster.

7 MS. FORSTER: Mr. O'Brien, I just wanted to
8 understand a little more about this NMFS activity. I have
9 heard it before and I just haven't been privy to studying
10 what they are doing.

11 What is their time frame on figuring out whether they
12 are going to do a rule making or not?

13 MR. O'BRIEN: They are in the process right now of
14 making that decision and as of about a week ago, I
15 understood they were going to be coming out with something
16 real shortly, within a month.

17 MS. FORSTER: And your industry and the people that
18 you are representing today, how do they feel about all of
19 this? Are they working in a real cooperative way? Do they
20 like the approach NMFS is taking, or have they resigned
21 themselves that NMFS is going to do this, so they will do
22 the best they can.

23 Tell me a little bit about the feelings out there
24 about this.

25 MR. O'BRIEN: Well, to be honest, they would just as

1 soon not have to deal with the whole thing, but I think they
2 recognize --

3 MR. DEL PIERO: I thought they were getting goose
4 bumps waiting to participate.

5 MR. CAFFREY: That is true, but not the kind of goose
6 bumps you are thinking about.

7 MR. O'BRIEN: We have proposed in a letter to NMFS a
8 somewhat different and creative kind of process which is
9 called *Negotiated Rule Making*. There's some provisions in
10 the Administrative Procedures Act that allow for this
11 negotiated rule making process, which would involve putting
12 together a panel of technical experts representing a cross-
13 section of different interests to try to deal with this
14 question of prioritization, and I would be glad to send the
15 Board members copies of the letter we submitted where we
16 laid this on the table, and I think they are very seriously
17 looking at that.

18 So, I guess the answer to your question is, we think
19 we have been proactive and very willing to sit down with
20 them and work on this problem.

21 MR. CAFFREY: Mr. Stubchaer.

22 MR. STUBCHAER: Regarding the financing of the
23 screens that are required, is it the concept that the owners
24 of those diversions or pumps requiring screening would bear
25 the whole cost, or would the cost of the screens be spread

1 among all diverters?

2 MR. O'BRIEN: In terms of what we are talking
3 about?

4 MR. STUBCHAER: Yes.

5 MR. O'BRIEN: There certainly has been no agreement
6 that that cost would be spread among all diverters. I guess
7 what we are really hopeful for is that there will be
8 continuing federal support. In the CVPIA fund there's
9 approximately two million dollars this year; I think more next
10 year for screens. That's 50 percent money, so it still
11 requires 50 percent local contribution.

12 So, I guess at this point the idea would be that the
13 user would pay at least some of that. We certainly hope
14 more money becomes available. Frankly, I think this ties
15 into the other issue about consensus on other issues.

16 I could see some potential for some of the M&I users
17 who have available funds assisting ag districts in screening
18 pumps, and maybe there's some benefits that could flow back
19 the other way, sort of similar to what happened in Imperial
20 Irrigation District. I think there's, you know, some real
21 potential for those two groups to come together. The ag
22 districts need the money, the M&I users need the water, and
23 I think if we could clarify some of the legal issues, that
24 that could be part of the package.

25 MR. CAFFREY: Anything else from Board members?

1 Thank you.

2 Anything from staff?

3 Thank you very much, we appreciate your comments.

4 Alan Lilly. Good morning, Mr. Lilly.

5 MR. LILLY: Good morning, Mr. Caffrey and members of
6 the Board.

7 I am Alan Lilly with Bartkiewicz, Kronick & Shanahan,
8 appearing here on behalf of Amador County Water Agency,
9 Browns Valley Irrigation District, Yolo County Flood Control
10 and Water Conservation District, and Yuba County Water
11 Agency, and I would like to just note that Mimi Mathews,
12 long-time member of the Yuba County Board of Supervisors,
13 Director of the Yuba County Flood Agency, and former
14 chairman, who was here for most days of the Yuba River
15 hearings, is also here today.

16 Mimi, would you please stand up.

17 MR. CAFFREY: Good morning. Welcome.

18 MR. LILLY: She is now the Director who has been on
19 the agency the longest and is certainly the most familiar
20 with this Board's proceedings.

21 I did submit written comments which looked like this.
22 I hope you all got copies. I gave copies to Ms. Leidigh
23 this morning and have extra copies here.

24 Since most of the points that I am going to make have
25 been covered, I will try to just highlight the points that

1 have not been covered.

2 First of all, for these Bay-Delta proceedings and
3 prior Bay-Delta proceedings, it is understandable we all
4 focus on the big picture on all the issues, but I think it
5 is important to just remind the Board that what we are
6 looking at now is adopting a water quality control plan and
7 not the water rights decision that apparently will come
8 later.

9 And there is a difference, an important difference
10 in the water quality control plan, I pulled out Porter-
11 Cologne and looked at it again over weekend and was happy to
12 note that there's some statutes which very clearly direct
13 the Board to look at the big picture and to make
14 recommendations to other agencies.

15 I have cited those statutes in my comments, and I
16 will just note I think some of the agencies that
17 recommendations should be made to have been mentioned and
18 some have not.

19 The Regional Water Quality Control Board certainly is
20 the obvious example for water quality matters, and this
21 Board obviously has a direct supervisory role there; the
22 Fish and Game Commission for regulation of inland species;
23 the Pacific Fisheries Management Council for regulation of
24 ocean anadromous fisheries; the Army Corps of Engineers for
25 its programs under Section 404 of the Clean Water Act and

1 Section 10 of the Rivers and Harbors Act; the Reclamation
2 Board for its jurisdiction over levees; and the Department
3 of Fish and Game, both for controlling illegal take of
4 species and also to control the introduction of more
5 undesirable exotic species.

6 And frankly, I realize it is complicated and it is
7 difficult to know what recommendations should be made, but I
8 submit that those recommendations are essential elements of
9 any truly comprehensive water quality control plan.

10 Secondly, I wholeheartedly support Mr. O'Brien's
11 comments that the water quality control plan should not be a
12 water rights decision. I think there are due process
13 limitations, and, of course, the whole list of complex
14 California water laws is going to have to be considered
15 before a water rights decision can be issued.

16 And, frankly, Porter-Cologne says that the
17 implementation program is supposed to contain a description
18 of the nature of the actions which are necessary to achieve
19 the objectives, and that, I think, we submit as a general
20 description, not a full water right decision.

21 Frankly, that's exactly what the Water Board did in
22 1991, and we support that same approach.

23 We agree with Mr. O'Brien's general statement
24 reaffirming that area of origin and watershed protection
25 statutes are appropriate and would give guidance to the

1 parties.

2 On point No. 3, we heard Fish and Game yesterday talk
3 about their new action plan and suggested that the Water
4 Board incorporate that as part of its Bay-Delta proceedings.

5 I am sorry, but we have to strongly disagree with
6 that. No matter how they package it an action plan has a
7 green color, the lower Yuba River management plan had a pink
8 color and I have forgotten what color the lower Mokelumne
9 River plan has, but they've got the same recommendations or
10 proposals in them, and, therefore, have the same scientific
11 deficiencies.

12 We went through 14 days of hearings on the lower Yuba
13 River and demonstrated, I think, very clearly that there was
14 no scientific support for those recommendations.

15 The Department of Fish and Game in that proceeding
16 totally ignored its own IFIM analysis and really simply
17 threw forward a wish list of instream flow and water
18 temperature requirements without substantial scientific
19 support.

20 We will wait for the decision from this Board from
21 that hearing, but in any event, the upstream inflow issue
22 should not be part of this proceeding. We went through this
23 argument back in 1992 in the Bay-Delta hearings, and we
24 basically told Chairman Maughan at that time if he wanted to
25 have all that evidence come in, we would be glad to submit

1 our responses again, but it would take a long time, and he
2 clearly ruled that he did not want that evidence in
3 regarding the upstream instream requirements, that the Bay-
4 Delta was complicated enough by itself, and we are a little
5 bit disturbed that Fish and Game is basically trying to get
6 around that ruling now.

7 We are also very disturbed about Fish and Game's
8 proposal that a portion of each reservoir in the watershed
9 be dedicated to Delta problems. We think that will clearly
10 violate the watershed protection and area of origin
11 statutes, and probably also be an unconstitutional taking of
12 property without just compensation.

13 This is not modifying a water right, this is telling
14 a water district that we are going to operate part of your
15 project for a different purpose, analogous to coming in and
16 saying, well, we will just take a couple of rooms in your
17 office building as we need them for state agency purposes.

18 We don't think Fish and Game can do that and we don't
19 think the Water Board should follow that approach.

20 Regarding the impacts of the upstream water projects,
21 I think those have been hit on fairly clearly and I would
22 just like to say I think there is no dispute that the
23 upstream water projects have had substantially lower and
24 definitely very different impacts on Delta fisheries than
25 the Central Valley Project and the State Water Project have.

1 Obviously, they haven't had the direct losses from
2 fish entrained in the Delta that the Central Valley Project
3 and the State Water Project pumps have had, and they haven't
4 caused reverse flows or changed flow patterns, and frankly,
5 they haven't blocked most of the spawning habitat the way
6 Shasta Dam did. It alone blocked over half of the spawning
7 habitat, and Oroville and Folsom have blocked substantial
8 portions of the remaining habitat.

9 Now, there have been some impacts from upstream
10 projects, both through entrainment of anadromous fish and
11 blocking of access to spawning habitat, and we agree that it
12 is appropriate for the Board to consider requirements to
13 mitigate those impacts.

14 Frankly, I think Mr. O'Brien said it very clearly on
15 the fish screen issue, that NMFS really has that matter
16 under control, but our point is if those upstream projects
17 have impacts on the fisheries, they ought to be addressed
18 and mitigated on a project-by-project basis because the
19 projects have very different impacts.

20 My clients' projects generally are high enough up in
21 the tributary that they haven't had the entrainment problems
22 that others have and they haven't blocked the watershed, the
23 spawning habitat that others have.

24 The one thing this Board should not do is simply say
25 in the general sense upstream projects have had impacts,

1 therefore, they have to contribute to Bay-Delta outflows and
2 are basically required to throw some water at the Delta to
3 help solve the problem. That is not appropriate.

4 And, of course, the point we have always had is the
5 upstream water projects have been there a long time. The
6 declines are much more recent.

7 So, I think there's analogies about the straw
8 breaking the camel's back, and now there's a lot of straws
9 and everyone has to contribute. I suggest the best analogy
10 is the upstream projects were the first few straws in the
11 camel's back and the camel was doing just fine until two
12 800-pound gorillas jumped on board and broke the camel's
13 back, and those are the Central Valley Project and the State
14 Water Project, and, therefore, it is not necessarily
15 appropriate to have some kind of pro rata or what they
16 euphemistically call equitable sharing of solving the
17 problem. They caused the problem, they pushed it over the
18 brink and they should be responsible.

19 We have heard a lot about the watershed protection
20 statutes. I just wanted to read -- the key provision is
21 Section 11460 of the Water Code, which incidentally, the
22 Legislature adopted in 1933, and it was subject to a
23 referendum petition very similar to that that the Peripheral
24 Canal bill was subject to. The crucial difference was this
25 one the voters passed and it has remained on the books and

1 has really been the foundation of California water law ever
2 since, and it says:

3 *In the construction and operation by the Department -*
4 *- that is the Department of Water Resources, and I cite it*
5 *in my written submittal that there is a parallel statute*
6 *that applies to the Bureau of Reclamation for operation of*
7 *the federal elements of the Central Valley Project -- of any*
8 *project under the provisions of this part; that is basically*
9 *the part that controls all Central Valley Project elements,*
10 *both State and Federal, a watershed or area wherein water*
11 *originates, or an area immediately adjacent thereto which*
12 *can conveniently be supplied with water therefrom, shall not*
13 *be deprived by the Department directly or indirectly, and I*
14 *added those underlines, of the prior right to all of the*
15 *water reasonably required to adequately supply the*
16 *beneficial needs of the watershed area or any of the*
17 *inhabitants or property owners therein.*

18 It doesn't say shall not be deprived except for
19 equitable and necessary forebay Delta outflow requirements
20 to mitigate the Central Valley Project and the State Water
21 Project impacts, and most importantly, it says directly or
22 indirectly.

23 And I submit directly means the Delta. The Delta is
24 part of the Sacramento Valley for watershed protection
25 statutes. There is no question about that.

1 The Attorney General has made that interpretation and
2 the Burns-Porter Act says it as well.

3 So, the projects cannot directly deprive the Delta of
4 water that is needed for beneficial uses therein. I am sure
5 in 1933, they weren't thinking of fish and wildlife, but
6 under subsequent statutes, particularly Water Code Section
7 1243, beneficial uses clearly include fish and wildlife
8 purposes; and it also says indirectly and that's us. That's
9 our clients.

10 That means the Central Valley Project and the State
11 Water Project cannot be operated if in doing so would
12 require our projects, the upstream projects in the watershed
13 of origin, to then have to contribute to Delta outflows
14 because that would be an indirect impact on them.

15 I also have down here on this overhead, and it's
16 quoted in my written submittal as well, valid arguments that
17 were made in 1959 and these were submitted by Senators Burns
18 and Richards, Burns from Fresno County and Richards from Los
19 Angeles County, in support of the Burns-Porter act.

20 And this is the promise they made to Northern
21 Californians: *No area will be deprived of the water to meet*
22 *the needs of another, nor will any area be asked to pay for*
23 *water delivered to another. Under this act the water rights*
24 *of Northern California will remain securely protected.*

25 Ladies and gentlemen, I don't think pooling an

1 equitable share, what they view as an equitable share, is
2 securely protecting the water right.

3 Now, we have heard, and Metropolitan submitted
4 detailed written comments yesterday basically saying that,
5 well, this Board has general authority under Article
6 X, Section 2, of the California Constitution to prohibit
7 unreasonable uses of water, and existing uses which have
8 been reasonable for the past century can become unreasonable
9 as the demand on water in California goes up.

10 In other words, as they need more water in Southern
11 California for their various purposes, whatever they are,
12 and I won't go into those, and I could make some cynical
13 comments about different uses, but basically now they are
14 saying that we need more water and it is no longer
15 reasonable for you to use the amount of water that you
16 historically used, not that you are wasting it or causing
17 any pollution, but it is just no longer reasonable. There
18 is not enough to go around anymore.

19 Well, I submit that that is a question that the
20 Legislature has already decided in these statutes,
21 particularly this one that is quoted, and if you read the
22 last sentence of Article 10, Section 2 of the California
23 Constitution, it says something to the effect that this
24 section shall be self-executing and the Legislature may
25 adopt statutes in furtherance thereof.

1 This is one of the statutes that the Legislature has
2 adopted in furtherance thereof. They have said it is
3 reasonable for people in the area of origin to use the water
4 they need, even if doing so will cause shortages or not
5 leave enough water for export areas.

6 Now, the Legislature, of course, has the power to
7 amend this statute, but as long as it is on the books, this
8 Board has to follow it until a specific directive from the
9 Legislature supersedes general policy in the Constitution,
10 and the Board does not have the authority to ignore this
11 statute.

12 The Forni case from the Napa River, which is
13 frequently cited by Metropolitan and the other Southern
14 California entities, is distinguishable just for that
15 reason, and in that case, there was no statute. The Napa
16 River diverters were all diverting water during the frost
17 protection season, drying up the river, and the Board
18 adopted a regulation to address that problem, and that was
19 upheld by the courts.

20 But here, the Legislature has spoken and has decided
21 how responsibilities will be allocated and the Board does
22 not have the discretion to ignore that.

23 MR. CAFFREY: Mr. Lilly, just a point of
24 clarification, because I don't want to get too far from what
25 this workshop is scoped for. I realize that you are

1 responding in some degree to comments that you heard
2 yesterday, but you are also in an area which I am having
3 some difficulty finding what we had scoped for today, unless
4 you are under item 2, review of CVP and SWP operations for
5 effects on ESA protected species and other species of
6 concern.

7 MR. LILLY: Well, excuse me, it addresses that issue,
8 but it also addresses -- by asking the question, what are
9 the effects of the upstream projects other than the CVP and
10 the SWP, I think clearly by implication you are asking what
11 contributions should be done from those, and obviously, I am
12 responding to Metropolitan.

13 I hope I haven't gone too far afield. I don't think
14 I have gone any farther afield than the other speakers have
15 on that issue.

16 MR. CAFFREY: No, I just wanted to make sure that I
17 understand where you are headed and where you think you are
18 in the process here.

19 MR. LILLY: Frankly, Mr. Caffrey, the comments were
20 addressed to issue No. 3, because I think when you ask what
21 the effects are of the upstream projects, I thought by
22 implication that was asking what should the upstream
23 projects be required to do to help solve the Bay-Delta
24 problems.

25 I hope I haven't gone too far.

1 MR. DEL PIERO: How much more does he have to
2 present? It was my sense he was getting close to the end of
3 it.

4 MR. LILLY: Mr. Del Piero had the advantage, he is
5 close to my notes. So, I'm on the bottom half of the last
6 page.

7 MR. CAFFREY: I didn't mean to stifle you. I wanted
8 to make sure -- we won't charge you for our questions. I
9 just wanted to be sure we were all in the same scoped area.

10 I can understand your applying your comments to the
11 interpretation you have just given us on item 3, so without
12 any further delay, I will defer to Mr. Del Piero's good
13 advice and allow you to continue.

14 MR. LILLY: The last point I want to make is what it
15 really comes down to is a question of trust, and, Mr.
16 Caffrey, we have taken seriously your admonition that we try
17 to work with other parties, and we are talking to other
18 parties as everyone else is, to try to develop solutions to
19 this matter.

20 But we have a basic problem. The first treaty that
21 was ever made in California water was this statute in 1933,
22 and that was to get the Central Valley Project approved.
23 That was the deal that was made and it was affirmed in 1959
24 to get the State project approved and it's been affirmed by
25 statute and multiple decisions from this Board and its

1 predecessors along the way.

2 It is very difficult to try to make agreements with
3 other parties if at the same time they are asking this Board
4 to break the prior agreements that were made, and that's
5 what we have here.

6 And, frankly, you know, we talk about the problem,
7 the effects of the project and others, and the reason we
8 have a Delta problem is the Peripheral Canal wasn't built.
9 We all know that if it had been built, we wouldn't have
10 reverse flows, wouldn't have entrainment at the pumps and so
11 forth, and the reason it wasn't built is that Northern
12 Californians and environmentalists didn't trust Southern
13 California water users.

14 The concern is that once that facility is in place,
15 the water will be gone forever. And, frankly, this Board
16 has a crucial role to honor that promise and to make it
17 clear that prior treaties will be honored and, therefore,
18 should provide the foundation for future treaties, and on
19 the other hand, if the Board takes water away without just
20 compensation, there never will be trust between north and
21 south, between environmentalists and M&I users and
22 agricultural users.

23 So, we think this needs to be considered very
24 strongly by the Board and we will certainly elaborate on it
25 in the July workshop, and with that, I close my comments.

1 MR. CAFFREY: Thank you very much, Mr. Lilly.

2 Questions from Board members?

3 It hasn't been the same without you, Mr. Lilly. We
4 haven't seen you lately.

5 MR. LILLY: I will be back in July. Thank you very
6 much.

7 MR. CAFFREY: Anything from the staff? Thank you
8 very much.

9 Kati Buehler, good morning.

10 MS. BUEHLER: Good morning, Mr. Chairman and members
11 of the Board.

12 My name is Kati Buehler with the Rice Industry
13 Association.

14 We weren't planning to testify at this particular
15 workshop, but after having attended yesterday's all-day
16 session, I feel compelled to make some comments about the
17 role of the rice pesticide as a factor contributing to the
18 decline of fisheries in the Bay-Delta.

19 Rich Golb of the Northern California Water
20 Association did an excellent job yesterday in explaining the
21 history and successes of the rice pesticide control program,
22 but in comments provided by others, it became clear to us
23 that what is now outdated information continues to surface
24 regarding the detrimental effects of rice-field effluent.

25 We hope the information presented today will

1 demonstrate that rice-field discharges no longer adversely
2 affect Delta water quality.

3 We readily admit the rice-field runoff did contribute
4 to water quality problems in the 1970s and 1980s. It was,
5 in fact, in response to those problems that the rice
6 industry agreed to cooperate with the Central Valley Water
7 Quality Control Board, the Department of Pesticide
8 Regulation and the Department of Fish and Game to initiate
9 the rice pesticide control program.

10 As Rich Golb mentioned yesterday, the Executive
11 Officer of the Regional Board, Mr. Bill Crooks, has called
12 this program one of the most successful water quality
13 control programs in the United States.

14 You heard yesterday the rice pesticide loads in the
15 Sacramento River have been reduced by over 99 percent in the
16 last ten years. The 1993 monitoring program revealed that
17 rice pesticides were below detectable levels at all the
18 locations downriver of the Sacramento I Street Bridge, the
19 northern boundary of the Delta.

20 And the rice industry's efforts to further reduce the
21 remaining one percent of the rice pesticide load is ongoing.

22 We offer these comments primarily to set the record
23 straight regarding the continuing myth of the adverse
24 impacts from rice-field discharges which has been
25 perpetuated, in our opinion, through the use of outdated

1 information, but we also offer this information to urge the
2 Board to include in any Delta water quality control plan a
3 mechanism which recognizes and gives credit for the past and
4 ongoing water quality improvement efforts.

5 The remarkable water quality improvements by rice
6 growers have not come without a price. Rice growers paid
7 three times more than the cost to others in irrigated
8 agriculture for compliance with the Regional Board's basin
9 plan. The cost exceeded 7.5 million dollars annually, or
10 about 15 dollars an acre.

11 Based on those figures, the rice industry has
12 contributed over 30 million dollars in Delta water quality
13 improvements since 1990.

14 I want to make one other point before leaving the
15 subject of pollutants. We wanted to make absolutely clear
16 for the record that Diazinon, which was mentioned yesterday
17 as a significant agricultural pollutant, is not used on
18 rice.

19 There was also discussion yesterday about the
20 possibility of having another workshop to focus on
21 pollutants. If, in fact, the Board thinks that's a good
22 idea, we would encourage the Board to consider using that
23 forum as an opportunity to set priorities regarding the
24 impacts of pollutants based on the risk to people and to the
25 environment. We would hope this exercise could then be the

1 basis for allocating the Board's limited resources to
2 address real problems in the most cost effective manner.

3 Over the years rice growers have also invested
4 millions of dollars in recirculating and closed water
5 systems in order to conserve water. Since the early 1980s,
6 rice growers have decreased their net water use by
7 approximately 30 percent.

8 This conservation effort shows that the water quality
9 improvements are, in fact, real, not merely the result of
10 dilution.

11 As with efforts in water quality, we ask that the
12 Board give credit for efforts in water conservation when
13 deciding implementation plans for the Delta.

14 Finally, we have some comments regarding the factor
15 of unscreened diversions. Taking water from rivers and
16 streams through unsafe diversions for any purpose can harm
17 fish and in some instances does.

18 The California rice industry has established a
19 credible record in working with fishery groups, government
20 agencies and environmental interests to design and implement
21 fish-safe water delivery systems in Northern California, and
22 I want to mention three specific examples.

23 On the Sacramento River efforts are under way to
24 rebuild a 40 million dollar state-of-the-art screen facility
25 at the Glenn-Colusa Irrigation District. As you probably

1 know, Glenn-Colusa Irrigation District is the largest
2 agricultural water district in Northern California. This
3 district also supplies more rice farms than any other
4 district in California, nearly 100,000 acres.

5 Another Northern California water agency that
6 services a major rice-producing area is the Maxwell
7 Irrigation District, and they voluntarily installed a
8 multimillion dollar screen this year to protect the
9 Sacramento River fishery.

10 On Butte Creek, the Rice Industry Association and the
11 Northern California Water Association are helping foster an
12 environmental agricultural consensus on a plan to restore
13 the spring-run salmon.

14 Our two organizations are also participating in a
15 CVPIA project to help draft a coordinated program for
16 funding and building fish screens on the Sacramento River to
17 protect the winter-run salmon and other species.

18 As you can see from these examples, and also, from
19 comments made by Mr. O'Brien and Mr. Lilly, there are
20 already a lot of efforts under way to deal with the
21 unscreened diversions.

22 In conclusion, the rice industry is eager to
23 participate in programs that prioritize and facilitate the
24 screening of diversions based on biological need. All we
25 ask for is a coordinated program with clear goals and

1 objectives backed up with a meaningful financial commitment.

2 And with that, thank you for the opportunity to
3 address the Board today, and we will be incorporating the
4 comments made here today in our final written comments which
5 we will be submitting in July.

6 Thank you for your time.

7 MR. CAFFREY: Thank you, Ms. Buehler.

8 Are there questions from the Board members?

9 Anything from staff?

10 I would just like to say in response to the earlier
11 part of your presentation, this Board is not unaware of the
12 efforts that industry is making in working with Region 5.
13 We appreciate that very much and I know you are making a lot
14 of progress, and industry has gone through great effort and
15 great expense to try and alleviate the problems of which you
16 are speaking, so they are not unknown to us, and we commend
17 you for your effort and we are following with interest what
18 is going on there, so thank you very much.

19 MS. BUEHLER: Thank you for those comments, Mr.
20 Chairman.

21 MR. CAFFREY: Thank you. That's the last of the
22 cards that were submitted today. Unless we have missed
23 anybody, let me announce that we will be back for the fourth
24 in our series of workshops on July 13. We also have the
25 14th, the 26th and 27 scheduled as well, so we will see how

1 that goes.

2 We want to thank you all very much for your input
3 which is very valuable to us, and we hope to see you in
4 July.

5 Thank you very much.

6 (The workshop was concluded.)

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1 REPORTER'S CERTIFICATE

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3 This is to certify that I, ALICE BOOK, a Certified
4 Shorthand Reporter, was present during the Public Hearing of
5 the STATE WATER RESOURCES CONTROL BOARD, STATE OF
6 CALIFORNIA, held in Sacramento, California, on June 14 and
7 15, 1994; that as such I recorded in stenographic writing
8 the proceedings therein held in the matter of *Review of*
9 *Water Quality Standards for the San Francisco*
10 *Bay/Sacramento-San Joaquin Delta Estuary*; that I thereafter
11 caused my said stenographic writing to be transcribed into
12 longhand typewriting and that the preceding Volumes III and
13 IV, constitute said transcript; that the same is a true and
14 correct transcription of my said stenographic writing for
15 the date and subject matter hereinabove described.

16 Dated: June 29, 1993.

17
18 A handwritten signature in cursive script that reads "Alice Book". The signature is written in black ink and is positioned above a horizontal line that spans the width of the signature.19 ALICE BOOK
20

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